

History of Bioterrorism: Plague

Visual	Audio
Opening Credits: "History of Bioterrorism"	
"Plague"	
Joanne Cono, MD, SciM National Center for Infectious Diseases	Man has used organisms found in nature to kill or disable his enemies since the middle ages. One of the earlier examples occurred in the 14 th Century
Kaffa paintings, Cono voiceover	<p>when the Tartar Army laid siege to Caffa, a walled city along the Black Sea. When an outbreak of bubonic plague began to ravage the Tartars, they decided to catapult the plague-ridden corpses into the city, thereby helping to start an outbreak within the walls. Shortly thereafter the Genoese defenders within the city were stricken with plague and fled to Italy. They carried this infection with them to Europe, beginning the outbreak of the horrible black death which decimated the European population.</p> <p>With our current knowledge of the epidemiology of plague,</p>
Cono in studio	we know that fleas leave a body quickly after it cools, therefore it's most likely that the outbreak was actually spread in Caffa by flea-infested rats which were already within the city.
Japanese footage, Cono voiceover	The Japanese imperial unit 731 operated in the 1930s and 40s when Japan was mobilized and ready for war. General Shiro Ishii masterminded this terrible program had a mission to turn illness into weapons of murder. Ishii was particularly fascinated by plague because with plague, a biological warfare attack could present like a natural epidemic. Person to person spread could then produce disease out of proportion to the original amount of agent used. The Japanese were unable to disseminate plague by either aerosol or in the water supply,
Cono in Studio	so they used nature's vector for spreading the disease, the common flea.
Japanese footage, Cono in Studio	Ceramic bombs loaded with infected fleas were dropped over several

	cities in mainland China, causing large outbreaks among their population.
Cono in Studio	Plague is attractive as a weapon because it generates fear, it spreads easily, and it kills very quickly.
US Footage, Cono voiceover	The United States offensive program did some research on plague, but it was never fully weaponized in this country. We could not overcome the challenge of maintaining virulence when it was grown in large quantities.
Fade to Clip of William C. Patrick III	It's just as well, I guess, that we didn't weaponize plague because it's a weapon that, you know, it's a contagious agent and we felt that in retrospect that we had enough problems controlling an aerosol under meteorological conditions that can change without having an organism that is so contagious that you know, you're not able to control where that organism might end up. It might come back to bite you. Not only bite your forces, but some of your friendly allied forces also.
Cono in Studio	Plague was, however, a favorite organism in the Soviet arsenal because of its communicability.
Soviet footage, Cono voiceover	The Soviets overcame the virulence problems experienced by the U.S. According to interviews with the Soviet defector, Dr. Alibek, they had 1,500 metric tons of plague on hand at any given time and kept it ready for use in their intercontinental ballistic missiles. Due to storage problems, they frequently recycled their stock pile of plague with fresh agent.
Cono in Studio	We're very concerned about terrorists' use of plague because the agent is found not only in nature, but also in numerous biological supply houses throughout the world.
